

STUDY
PROJECT

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

BRAZIL 2000
A LOOK AT AN OLD ALLY THAT IS CHANGING

BY

LTC GEORGE BECKETT

26 APRIL 1982



✓ US ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013

Approved for public release:
distribution unlimited.

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER	
	AD-A116 243		
4. TITLE (and Subtitle) Brazil 2000 A Look At An Old Ally That Is Changing		5. TYPE OF REPORT & PERIOD COVERED Student Essay	
		6. PERFORMING ORG. REPORT NUMBER	
7. AUTHOR(s) LTC George Beckett		8. CONTRACT OR GRANT NUMBER(s)	
9. PERFORMING ORGANIZATION NAME AND ADDRESS US Army War College Carlisle Barracks, Pa. 17013		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
11. CONTROLLING OFFICE NAME AND ADDRESS Same		12. REPORT DATE 26 April 1982	
		13. NUMBER OF PAGES 40	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified	
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.			
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)			
18. SUPPLEMENTARY NOTES			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The author looks at the current status of the economics, the politics, and the military of Brazil and her relationship with the U.S. At the same time, he talks about Brazil's status in the future. At the end he denies conclusions and makes recommendations about what the U.S. must do to improve the relationship in the future.			

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

US ARMY WAR COLLEGE
INDIVIDUAL RESEARCH BASED ESSAY

BRAZIL 2000
A LOOK AT AN OLD ALLY THAT IS CHANGING
BY
LTC GEORGE BECKETT



26 APRIL 1982

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Avail and/or	
Dist	Special
A	

Approved for public release
distribution unlimited.

TABLE OF CONTENTS

CHAPTER	PAGE
1. INTRODUCTION	1
2. ECONOMICS OF BRAZIL	3
3. POLITICS OF BRAZIL	13
4. THE BRAZILIAN MILITARY	21
5. US AND BRAZIL RELATIONS	30
6. CONCLUSIONS	35
7. RECOMMENDATIONS	37

CHAPTER 1

INTRODUCTION

Nations, as people, have a life cycle that advances in stages from birth, through maturity to the years of decline. Brazil is blasting through the developing years into a powerful, mature nation at speeds which are shocking the world. Brazil is developing its economic resources by using comprehensive plans that tie each phase of the development and production into a coordinated and well-orchestrated program that addresses near, as well as long range, national needs. Politically, the world's nations are beginning to recognize Brazil as an important leader as she starts to fulfill the requirements of a major power base. Socially, the Brazilians are advancing as their country grows although some setbacks have occurred recently. The Brazilian Military has long enjoyed a fine reputation and is now a powerful force with modern equipment. The military is acquiring projection capability.

As Brazil rockets into world dominance, there are many who build the case that the U.S., while not yet in the declining stage, is a very advanced, mature nation. When one compares the US to the now declining but, once powerful nations of Europe, the likeness of processes, problems, and the attitudes of people and other nations is appalling. The thought that our great nation must share the leadership of the

Western Hemisphere -- maybe even the Western World -- with another nation is untenable by Americans. But, a close look at our neighbor to the South will reveal that this gaint is growing, and it is high time that we review our relationship and seriously develop long range plans to handle some inevitable changes.

In this paper I will discuss the current status of Brazil and her outlook for the next 20-30 years. Secondly, I believe that our past national relationships, which have alternated from warm to cold, must be adjusted to insure that we openly become close mutual allies. The military forces of the two nations provide the perfect conduit for the beginning of a new era.

CHAPTER 2

ECONOMICS OF BRAZIL

Economists of the world have devised numerous econometric models and various arithmetic methods of predicting the precise position a country will achieve at some given point in the future. The effort spent in developing these predictions was to aid business and industry in the investment of capital and to determine how certain products would fit into the world's supply and demand equation. The work has produced some very sophisticated models that do not work too well because of the dynamics of the world economy. A sudden change in the model's assumptions such as the Arab oil price increase and production reduction, or an internal security problem of a country or even a weather pattern shift that causes an extensive drought will void all predictions.

Various econometric models have predicted that Brazil's gross national product will rank by the year of 2000 ahead of Britain, Italy, Canada and France but well behind the U.S., Japan, Germany and the USSR.¹ It is safe to say that Brazil will be the leading South American economic power in the future as it is now. When the potential of Brazil's economy is studied, it is also safe to say that this country will be a major world economic power for many decades to come.

Natural Resources

Brazilians do not know the total extent of their natural resources. To date many minerals have been discovered, tested, and measured, but the full potential is not yet known because vast areas of the country have not been explored. As unbelievable as it sounds, there are geographic portions of Brazil that are virtually undiscovered. Thus, it is anyone's guess as to what minerals are available and the value of those finds.

Depletable Resources

Depletable resources are those resources which man has not found a way to replenish. Minerals, metals, and oil fall into this category.

Brazil has found major deposits of national potential of iron, copper, bauxite, chromium and uranium.² These minerals are considered today to be necessary ingredients for a country to have a strong industrial base. The extent of the iron and aluminum deposits is considered very large and should exceed the industrial base needs for years, with considerable amounts available for export.

Explorers have discovered the minerals of columbium, tantalum, diamonds, lime, lithium, manazite, tin, asbestos, tungston and magnesium in various amounts.³ While these minerals may not be of national potential at this point, future discoveries or technological advances certainly could propel a major change. Nickle appears to be the only important industrial mineral that is missing from the Brazilian inventory.

National planners are looking toward self-sufficiency more than exports at this time. The planners, rightfully so, feel that over the

long run it is more important for the country to develop a strong industrial base which is supplied from within the country's borders.

Many of the minerals are located in the remote areas of the interiors where transportation is currently underdeveloped. The transportation system must first be improved before the minerals can be fully explored. While this lack of transportation appears to be a major problem it could well be an advantage in that the rest of the world is rapidly using up its depletable resources while the Brazilian deposits appreciate in demand and value.

Replenishable Resources

Replenishable or renewable resources are those natural resources which man replaces. Agricultural products and timber products are in this category.

From its beginning in the 1500's Brazil has historically been an exporter of agricultural products to the industrial nations of the world. Only the United States exports more food stuffs than does Brazil. The U.S. Department of Agriculture reported "No other country in the world produces a wider variety of agricultural products in significant quantities, then does Brazil."⁴ The main crops for export are coffee, soybeans, sugar cane, cocoa and citrus. The importance of food export is well understood by the economic planners. In the Third National Development Plan for the 1980-4 period, the strategy of the sale of food for foreign currency for developmental projects is clearly stated.

The potential for food production is an untapped resource as only eight percent of the total land is under cultivation.⁵ The production rates per acre are low when compared to US standards. The production potential lies in the use of technology and the proper balance of other

natural resources into the agriculture sector. As is the historical trend of all developed countries, the percentage of the population required in the farming sector is decreasing. Brazil is striving hard to increase its production of food and grain for internal use as well as export.

In a food-short world the political and economic potential of Brazil is greatly increased. Most experts do not see an end to the world food problems anytime in the near future. As the world population continues to grow, the importance of Brazil as a foodbasket will increase.

Brazil is the leading producer of wood. Technology may place wood into a non-essential category at some future date, but for now the world does need the wood of Brazil.

Energy

Brazil's Achilles heel is the same as Europe, US, Japan, USSR, and most other developed countries — Oil. Brazil must import 87% of 1.1 million barrels of oil required daily.⁶ This dependence on foreign oil makes the economy very sensitive to supply and price over which it has no control. There is not an easy solution to the energy problem. The coal reserves are scant, and the gas reserves are even less. There are large shale oil deposits, but the conversion technology is years from making this an economic source of fuel. The big promise of bio-mass fuel seems to have faded, although some long range benefits may occur if technical advances are discovered.

Hydroelectric and nuclear energy appear to be the best solutions at the moment. Each solution has some difficulties that must be faced. The potential for hydroelectric energy is the largest in the world. The

industrial centers of the country are located within 300 miles of the East coast, and the hydroelectric production centers are located across the nation in the Amazon Area. During the past several years the government has made strides in developing hydroelectricity and, at the same time, encouraging industry to move closer to the power source.

Brazil has large uranium deposits and can enrich the ore for nuclear power. The government has proceeded with German firms for the installation of nuclear power plants even though the U.S. government protested the proliferation of nuclear power in South America. The installation of the plants which are scheduled for production in 1985 have caused other political problems, especially with Argentina. The fear of nuclear weapons has caused the neighbors to view Brazil with a cautious eye.

To help solve the energy problem Brazil has agreed to joint adventures with foreign companies for offshore exploration of oil. Brazil has repeatedly refused to permit foreign exploration of natural resources for several years because the government did not feel this was in the national interest. With this recent change of policy, it is clear that Brazil is serious about its intent to stop its energy dependency on foreign sources and transition into self-sufficiency as rapidly as possible.

Industrial Base

Brazil is rapidly building a strong modern industrial base. The speed with which the gains have been made demonstrates the planning of the nation and its dedication to these plans. To fully appreciate the industrial growth, it must be remembered that until the late 1930's this nation was considered one of those "banana republics" that could only

produce food and some raw materials.

Steel production rose from 23rd in world tonnage in 1965 to 13th in 1979 and ranks 8th in the Western World.⁷ Brazil has surpassed its own needs and is an exporter. Brazil has the largest and most modern shipyards in the Southern Hemisphere. By 1978 Brazil was second only to Japan in tonnage under order.⁸

Brazil has demonstrated its ability to handle the competitiveness of sophisticated manufacturing by becoming the exporter of trucks, cars, airplanes and war equipment. Most of the exports are to third world countries and are considered of good quality and dependability. Most of this type of industry is financed by foreign investment because Brazil does not have the capital or technical expertise. But by permitting foreign firms to participate in the production, Brazilians are gaining both capital and technology. The industrial base requires only time to become major. The potential is there.

Financing

The weak link in the economic chain is financing. This is not really surprising as most all countries in the world except for a few highly developed countries have financing difficulties. Russia, considered a Superpower, is continuously searching to find new ways to raise capital. Some writers such as Douglas H. Graham paint the impression that this weakness is so great that it prevents Brazil from becoming more influential in the world.⁹

To get the financing required to develop its resources, Brazil has had to look to other countries for assistance in the form of loans, foreign private investments, and some trade agreements that would provide profits in the long term instead of the normal near term. The

foreign debit of Brazil has grown from 4.3 billion dollars in 1969 to 27.5 billion in 1976.¹⁰ During that same time the import/export ratio changed from a 2:3:1.9 to 10.1:12.2.¹¹ These changes occurred not from mismanagement but from the fact that the oil producing Arab nations reduced oil production and increased its price several fold. The economies of the oil-importing nations of the world reacted just like the Brazilian economy. Brazil has recovered during the past three or four years and has gotten its international ratios back to a more favorable position. On a relative scale Brazil recovered from the Arabic Oil Hijacking quicker than most developed or developing nations because the government actively sought new external sources and designed near and long term solutions to the energy problem. The production of bio-mass alcohol to supplement gasoline started the oil-poor nations thinking about substitute fuels.

The use of foreign capital by the Brazilians is interesting and creative, to use a new American financial term. An example is the Rio do Norte Mining Company located in Trombetas which mines bauxite from which aluminum is extracted. The company is funded as follows: 46 percent by the state owned Rio Doce Valley Company; 19 percent by ALCAN Company of Canada; 10 percent by the Billiton Company (Shell group) of the Netherlands; 5 percent each by Mornorsk Ridro of Norway, Reynolds of the US and Aluesa of Spain; and 10 percent by Brazilian Aluminum Company of the Votorantim group, which is a privately owned Brazilian company.¹² Through outstanding business negotiations and solid long range planning, the government was able to induce private firms from five different nations to invest in a major and expensive undertaking. It should be noted that Rio Do Norte Mining Company is solidly owned by Brazil in that 56% of stock is controlled by the government and the Votorantim

Group.

The Jari project is another example of how the Brazilians have used foreign investment to their full advantage and demonstrates their knowledge of international financing. The Jari Project was an attempt by the American shipping magnate Daniel Ludwig to tame the Amazon Jungle in 1967 by harvesting the forests, selling the wood products, replanting some of the land into controllable forests, and turning the remainder into high production agriculture units. The project included 5,000 square miles of jungle.

Ludwig found his entire business operations overextended and was forced to sell the Jari Project recently. The government put together twenty-three of the countries leading private firms into a group that purchased the project. The New Jari Group will pay Ludwig no cash immediately, but will pay the firms debts of 340 million dollars and then pay dividends to Ludwig's cancer research institute from 1987 to 2021.¹³ The bottom line of the transfer is: The entire transaction is legal and ethical, Brazilians regain complete control of 5,000 square miles of their territory, the business community learns from Ludwig's mistakes, the risk factor was taken by Ludwig and not the Brazilians and the big winner in this venture will be Brazil.

Graham and others see Brazil's major downfall as finance. Brazil is short of capital, as are all developing nations, unless they have oil or gold which can be sold quickly for hard currency. Brazil is using internal finance to develop the consumer market and foreign cash to develop the international and the export markets. The system is working as evidenced by the number of foreign governments and private firms that are willing to place their money into the future of the

economy.

The Economic Attitude

History is full of examples of resource rich countries that could never become major world powers economically. Normally, the reason of non-growth was related to the attitude of the people or more especially the people in the government. Brazil is trying its best to avoid these historical pitfalls by seeking the best advice available and conducting long range economic planning.

The military government of President General Joao Figueireo and his predecessors has approached the building of the economy as a long range project that is absolutely essential to the growth and survival of the country. The government and business have joined hands to insure that what is good for business is good for the country and vice versa. The combination is powerful due to congenial goals and the willingness to acknowledge that the future is most important. Today's profits are only a step toward the future.

The Rio De Janeiro newspapers report daily of new economic agreements and pacts with foreign nations. Some are small, such as Siriname and Guyana; some are larger, like the bauxite agreement with Russia, some are energy important, as the new agreement with Ecuador; many are to the mutual interest of both counties, such as the copper endeavor with Chile and the exchange of food with GDR for agriculture laboratory equipment and technology. But, when the agreements are reviewed in totality, it is obvious that the attitude of the country is growth - growth from a middle country to an important world nation.

ENDNOTES

CHAPTER 2

1. Selcher, Wayne, Brazil in the International System: The Rise of a Middle Power, Westview Press 1981, p. 119.

2. Ibid, p. 42.

3. Ibid, p. 44.

4. Ibid, p. 29.

5. Ibid, p. 31.

6. Ibid, p. 40.

7. Ibid, p. 36.

8. Ibid, p. 38.

9. Graham, Douglas H., The Future of Brazil, edited by William H. Overholt, Westview Press, 1978, p. 103-147.

10. Ibid, p. 112.

11. Ibid, p. 112.

12. Company Sells Bauxite to Soviet Union, Rio de Janeiro O. Globo, p. 20, as reported by FBIS, 10 February 1982, Vol. VI No. 028.

13. Jari Project Transferred to National Businessmen, Latin American Daily Post, p. 5, as reported by FBIS, Vol. VI No. 024, 4 February 1982.

CHAPTER 3

POLITICS OF BRAZIL

If the measuring of economic power is a difficult task, then the measuring of political power is next to impossible. Political power, especially potential power, is the totality of a nation to include its leadership and the ability of the nation to project that power to influence others. Political power is more perceived than real, although the effects are a reality. This chapter will deal with internal, regional, and international politics of Brazil.

Internal

Brazil has a military democracy form of government, or as Riordan Roett has termed it, the "military republic."¹ Prior to the military coup in 1964 Brazil was a democracy. The political system was very similar to that of the United States. There was more or less an equality between the executive and legislative branches of government. The judicial branch was set apart as the third Branch.

With the military takeover came a major shift in power from the legislative and judicial branches to the executive branch. The military leadership tried to make the democratic form of government operational but found that it was not the most effective or efficient in the attainment of intra or international Brazilian goals. To modify these road blocks, a series of Institutional Acts were passed in 1964 and 1967.

These acts permitted the president almost absolute power, even the power to modify the 1946 constitution by executive amendment. Gradually over the years since 1964, some power has been returned to the legislature and decentralized from the president. When the released power has been misused or not used to support the goals of the nation, that power was quickly returned to the office of the president.

The president is elected by popular vote. There are political parties in Brazil, but for the purpose of national power they are ineffective except for the military party. The presidential candidate is selected by the Council of Generals. The generals decide who is best qualified to lead the nation for the next six years and they then totally support the candidate. The president is always a four star general and must consult with the Council of Generals on issues of major political significance. Thus, the president lives and dies by the military.

Each department of the national government has military officers in the decision making level. With the exception of the military, the departments are basically controlled by civilians. Some of the departments that have long range planning and execution responsibilities, such as the Economic Development and Social Developments Councils, have great leadership stability. This stability in leadership has permitted the orderly implementation of well thought-out plans.

The president has the normal number of secretaries who are specialized in various aspects of the nation to advise him. He relies heavily on these advisors as well as some special councils. The special councils are: The National Security Council, Civil Cabinet, Planning Secretariat, Armed Forces General Staff, National Intelligence Service,

High Command of the Armed Forces and Economic Development Council.²

The country is divided into states and subregions. While the military is heavily involved in state and regional governments, but the officials are elected more on a democratic basis. "The methods, indeed the intermediate goals, have changed with time and circumstances, but the ultimate objective of "grandeza nacional" on national grandeur, has endured."³ The goal of a great Brazil has been the objective of all recent governments, and the theme has been taught to each Brazilian. A good example of Grandeza Nacional is the World War II objectives that the Foreign Minister Oswaldo Aranha drew up in 1943. Those objectives were:

1. A better position in world politics;
2. A better position in the politics of the neighboring countries via consolidation of its preeminence in South America;
3. A more confident and intimate solidarity with the United States;
4. An increasing ascendancy over Portugal and its possessions;
5. The establishment of maritime power;
6. The establishment of air power;
7. The foundation of a war industry;
8. The establishment of light industries - agricultural, extractive, and mineral - complementary to those of North America and necessary for world reconstruction;
9. The extension of railways and highways for economic and strategic reasons;
10. The exploitation of essential fuels.⁴

Today the government spends much time and effort in teaching the population and especially the students the importance of a great Brazil.

The country's elite and military totally support the National theme. The populist support the theme, but question the price that must be paid in economic and political freedom terms. The questioning is mild when compared to populations normally found in South America. The combination of full employment, a rising strong middle class, and use of military or police force has helped the national government to become strong and

popular. The combination has kept communism from making inroads.

The press has had all restrictions lifted from it recently. Brazil is scheduled for elections this fall. Political observers see these two changes as leading factors of the possibility of Brazil becoming a true democratic nation again. Should the press abuse its freedom or an unexpected turn occur in the election, the military will recant the freedoms for another extended period of time.

For the future, Brazil can be expected to remain the most stable country in the Southern Cone. "Grandeza Nacional" will remain the strong theme which has the support of the people. Only a severe economic depression for a long period of time could seriously threaten the government. An economic disaster of that magnitude would affect most all developed nations, not just Brazil.

Regionally

Brazil has regional influence in all of South America. In the Southern Cone, Brazil is truly a giant. She joins borders with every country on the continent except Chile and Ecuador. Historically, Brazil has stood alone. Being so large and speaking a different language has caused her neighbors to consider Brazil a security threat. Over the years several wars have been fought to determine boundaries. But, during recent times, disputes have been settled in peaceful ways. By promoting the softer touch to settle problems and living within the bounds of the RIO PACT, Brazil and her neighbors have been able to spend their resources on problems other than security. This peace has afforded the countries the opportunity to develop. Brazil has taken full advantage of the peace.

During the mid 1900s Argentina was considered the leading South

American country. During the economic miracle of the 1960s and 70s, Brazil rose above Argentina economically and has assumed the political leadership role. Argentina has not accepted this change with open arms. The number of bilateral economic agreements that Brazil has negotiated with her neighbors signifies the importance of her economy to those other nations. From their agreements come political power.

Militarily the Brazilian force is the most modern in South America. It is large enough to convince any possible aggressor that caution is the better course. Once Brazil's nuclear reactor comes on line and she develops the capability to manufacture a nuclear weapon, the value of her military stock will rise substantially.

As time passes and Brazil continues to grow economically, politically, and militarily, there is no doubt that she will rise to be the true leader of South America. The leadership role will be assumed quietly and without military conflict.

Internationally

Determining Brazil's position in the international scene is a most interesting task. International power is relatively dynamic and truly perceived.

Figure A is a notional continuum that depicts the strength of a nation's international power or influence when compared to other countries. At the low end of the scale are the small underdeveloped countries that have so many internal problems that they have no major influence on the world. On the opposite end of the scale are the super-powers like the United States and Russia and these countries do influence the world daily.

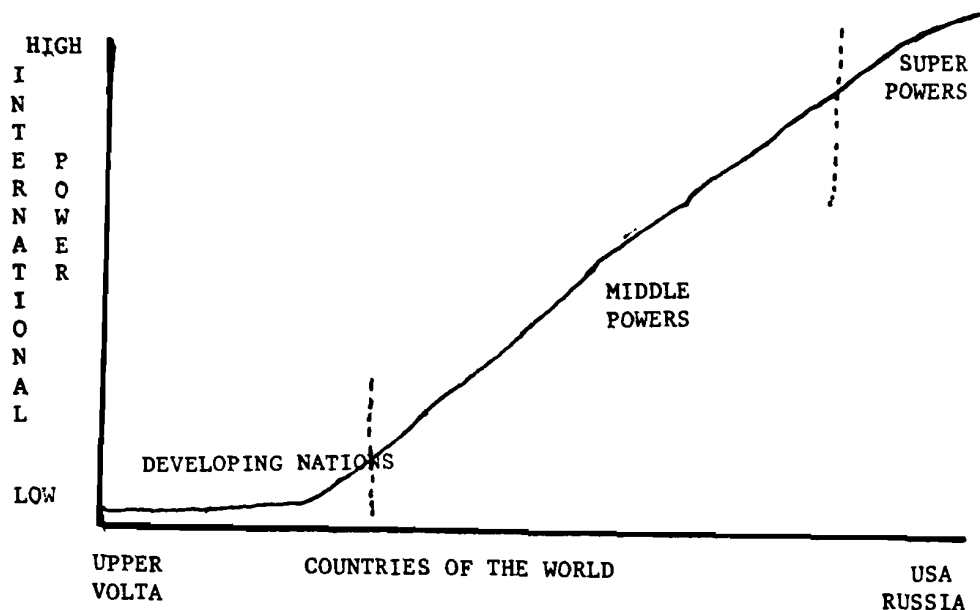


FIGURE A

The interesting group is the middle power nations. Brazil is in the middle power nations along with Germany, France, England, Japan, India and several others. To determine the exact location of a country on the scale, several factors such as economics, military forces, leadership, and historical roles must be weighted. Imprecision in measurements leave the entire equation open to question. Brazil has well passed the underdeveloped stage and is moving rapidly through the middle power stage.

Being a middle power has presented some hard decisions for the government leadership. Should Brazil become the leader of the third world nations? Should Brazil remain alone non-aligned? Should Brazil attach itself with one of the superpowers and let that influence help pull the nation forward?

Brazil seems to have taken a pragmatic approach to the opportunities it has been afforded by the middle power status. Since the 1800s

Brazil has been considered a close friend of the United States. In the 1970s that relationship started to cool. The civil rights and nuclear power issues actually turned the relationship cold at times. Brazil trades with Russia but, it cannot be considered a warm friend. The relationships with the underdeveloped nations are based on economic trading more than political influence or the desire to assume a leadership role. Her dealings with the other middle power nations is economic.

Brazil's United Nation voting record supports the pragmatic approach to survival. One wonders if Brazil is not really following the "Grandeza Nacional" objective in all of its relationship and merely waiting for the nation to grow stronger before assuming an international leadership role. Another reason for withholding is the fact that while the Brazilian military is a strong force, it does not have the capability of projecting and supporting the force over long distances. In today's world the ability to project military forces is important.

Summary

Brazil is no longer a "banana republic" located in the jungles of South America. The nation has risen from an underdeveloped country to a strong middle power in less than thirty years. The leadership has built a nation that is strong internally and will remain stable in the future, barring some worldwide economic disaster. Regionally, Brazil is a giant that is pulling its neighbors into its economic, thus its political orbit, not with force but, with a gentle hand. Internationally, Brazil has refused to be permanently aligned with any nation or camp but has followed a pragmatic approach to each problem. This approach has gained Brazil many ties and economic advantages.

ENDNOTES

1. Selcher, Wayne, Brazil in the International System: The Rise of a Middle Power, Western Press, Colorado, 1981, p. 17.
2. Overholt, William, The Future of Brazil, Westview Press Colorado, 1978, p. 73.
3. Selcher, p. 1.
4. Ibid., p. 10.

CHAPTER 4

THE BRAZILIAN MILITARY

The Brazilian Military forces have a long and proud history. The military has always been one of, if not the main player, in the federal government. Since the 1964 military takeover of the government, it is impossible to draw a neat line that would separate the military and the government. John Keegan states "The military's primary role is to exercise the 'moderating power' over the politics of the country and to guarantee its unity."¹ Normally, when a military force is very involved in the operations of government there is a tendency to disregard the organization as an effective fighting force. This is not the case in Brazil. Brazil does have a very effective military force that is gaining more capability of projecting itself into the world scene.

History

The Brazilian Armed Forces have always been a defense force with the mission of protecting the country from foreign invasions. During the 18th and 19th Centuries the forces were used to settle border disputes with neighboring countries. During both world wars Brazil tried to remain neutral but in both cases was forced to enter the war. The Germans sunk a Brazilian merchant ship at the start of WW I and the country declared war. The extent of the military effort was limited to several naval demonstrations, commitment of a small number of medical

personnel to the European theater, and the assignment of less than 100 officers to the French forces.

Again during WW II the Germans sank a Brazilian merchant ship, which forced the government to declare war. This time Brazilian combat troops were sent to the European theater. The Expeditionary Force which equalled to a division, fought with great distinction in Italy. Brazil granted the U.S. the right to use its naval and air bases during the war and participated in anti-submarine warfare in the South Atlantic. During this period the military gained the respect of the U.S. military and that relationship has lasted over the years.

The Brazilian military participated to a very limited degree in the resolution of the Dominican Republic problems in the early 1960s. The participation was limited to the use of some officers and headquarters personnel.

In recent years the military has controlled nearly every phase of the government. Officers have historically been on detached duty with the political agencies. In 1961 at least 1100 officers were assigned such duties.² The Armed Forces have also been assigned major projects designed to assist the country and its people. One example is the building and maintenance of the roads in the Amazon region. These projects give excellent training to the forces and help gain popular support of the military. During the past twenty years the military forces have made great strides in modernizing their equipment.

The government has continued to rely on the draft for its manpower but the draft has been selectively applied because approximately one million men become of age (18) each year and volunteerism is high.³ The country has no organized reserve but does have some 200,000 paramilitary

forces that are available.⁴

Organization

The Brazilian Military establishment is organized very similar to that of the United States. The President is the Commander-in-Chief of all armed forces. The president is assisted in his military role by the National Security Council, an Armed Forces General Staff, ministries of war, Navy and Air Forces, and a personal staff known as the Military Household.⁵ The Military Household is responsible for the security of the president and acts as a liaison between him and the service ministries. The services are separate, have their own logistical support, often show interservice jealousies and compete with each other for budgetary funds. The Army is the more powerful service due to size, history and the fact that it has the General Staff. Also, since the military takeover the President has always been an Army General.

The Army

The Army, as well as the other services, are operationally organized and territorially based in the six major territories of the country. The Army is further organized into eight infantry divisions, four mechanized divisions, one armored division and one airborne brigade.⁶ Selected brigades have special training in jungle and mountain warfare.

The Army is equipped with (major items):

- 250 medium tanks (M-4, M-47)
- 200 light tanks (M-41, M-3)
- 500 APCs (M-113, M-59)
- 120 armored cars (M-8), scout cars (M-3),
and half tracks (M-2)
- 200 light and medium artillery pieces (75 mm,
105 mm self-propelled, 155 mm)
- 50 antiaircraft guns (M-117 90 mm, M-1 40 mm)
- Hawk surface-to-air missiles (9 batteries)

49 liaison aircraft (L-42, O-1E)
15 helicopters (Bell 206A and UH-1D)⁷

The Army is constantly upgrading its equipment as demonstrated by the recent purchase of Roland missile system and modern helicopters.

The size of the Army is 180,000 well trained, highly motivated and frequently exercised soldiers.

The Navy

The Navy has 44,500 sailors and 1,000 marines.⁸ The Navy is organized into six naval commands and one fleet command. The units are based on the coast as well as the major inland waterways, depending on the assigned mission. The navy is in the process of modernizing its equipment. Currently, the navy has 10 submarines, 1 light aircraft carrier, 20 destroyers which are armed with the Seacat or Exocet missiles, 10 patrol ships, 6 minesweepers and some 150 transports landing and service craft.⁹

The Navy has blue sea capability albeit short range. Plans have been approved to improve the projection capability of the Navy during the mid term. The merchant fleet contained nearly 300 major ships.

The Air Force

The Air Force has 36,000 personnel located in the six air zones (territorial). The Air Force is organized similar to the US Air Force. The results of the modernization program are evident in this inventory of aircraft:

- 160 combat aircraft
 - 32 F-5 fighter-bombers
 - 32 AT-26 Xavante fighter-bombers
 - 16 Mirage III fighters
 - 82 armed trainers (T-25/AT-26)
- 550 other aircraft
 - 150 transports (C-130/47, Boeing 737, Buffalo, C-119, HS-748/125, C-95 Bandeirante)

40 maritime patrol and ASW (S-2, PBV, HU-16, C-95)
50 liaison-observation (L-42)
80 helicopters (OH-1, UH-1, Jet Ranger)
230 trainer/miscellaneous support aircraft¹⁰

The combat aircraft are armed with the Ikara, Seacat, Exocet and Matra missiles.¹¹ The Civilian Air Fleet has well over 100 major aircraft that could be used by the military if required.

Schooling

The military school system of the Armed Forces is based on the US system. It is the result of our military aid to Brazil plus the numerous exchange programs from years gone by. The top of the school system is the Superior War College (ESG). ESG is very important to the military and the government in that officers are trained in the military, social, governmental, political, and economic aspects of Brazil. The school is used to help solve national problems and to identify those officers that will be assigned to high governmental positions.

Defense Industrial Base

There is no more visible evidence of the interlocking of the Brazilian government and military than in the defense production base.

Brazil industrial base produces all of the light equipment (that equipment not designed solely for war) that is required by the military. The lack of technology and manufacturing expertise has hindered the production of war equipment until recently. During the past 15 years the government and the military have combined efforts to create a military defense production base. Through these efforts Brazil is now an exporter of armed reconnaissance vehicles and armor personnel carriers.¹² Brazil is also increasing its exports of small arms, some heavy guns,

logistics support vehicle, and trucks.

Current efforts are focused on the aircraft industry. The main complex of production is the EMBRAER Aircraft Company, which produces a wide range of civilian and military airplane. The Aerospatiale Company of France and the Brazilian firm Helibras have started construction of a helicopter plant which will have its production line open in the early 1980s.¹³ The first helicopters will be civilian with plans for military production shortly thereafter. Additionally, Argentina and Brazil have agreed to co-produce some light aircraft.

Exports thus far have been mainly to oil producing nations of the Middle East and Africa. The trades have been for oil that the country needs so badly. Brazil has invested large sums of money into research and development. As the fruits of this R&D start to develop, Brazil can expect to become a major exporter of war equipment to many more countries. The industrial base will, of course, provide the Brazilian forces with modern equipment.

World Ranking

Ranking the world's military forces is a very imprecise profession but, one that is lot of fun. Max Manwaring uses an arithmetic model which includes weighted factors for these principal components of military strength: Numbers of personnel in force, theoretical capacity to produce 20 KT weapons, Merchant Marine tonnage, numbers of passengers carried on domestics airlines, defense expenditures per capita, arms export, and government revenue per capita.¹⁴ Using this formula Manwaring ranking places Brazil 16th - the U.S. first, USSR second, Poland 15th and Turkey 18th. The International Institute for Strategic Studies ranks Brazil as the 17th most powerful military force on earth.¹⁵

These studies are dated in that the data used in each study is of the 1975-6 vintage. The dynamics of military power have caused some major shift in higher ranked nations, and the Brazilian force has grown stronger especially the infrastructure and the defense industrial production base.

Using data from The Almanac of World Military Powers, I made a simple comparison of the populations under arms and the amount of gross national product spent on the military forces of several randomly selected nations. The percentages in Figure A show that while the military forces of Brazil are relatively large and well equipped, the forces are not a burden on either the population or the economy. The figures also show that Brazil can maintain the steady state, increase at a preplanned rate, or surge if required.

Figure A			
Country	Population (Millions)	Percentage of Population in Armed Forces	Percentage of GNP on Military Forces
Brazil	122	0.17	1.56
USA	219	1.36	5.98
Canada	23	0.19	1.80
Argentina	26	0.55	3.63
Mexico	66	0.14	0.85
S. Korea	39	1.64	10.16
Germany	61	0.80	3.70
France	53	0.92	4.62

Source: The Almanac of World Military Powers, 1980.

Summary

Regardless of the relative ranking of the military power, Brazil has a formidable force that is constantly improving its equipment and projection capability. The force was designed for internal defense and protection from regional forces and has reached those goals. The force could be projected outside the South American region on a limited basis. The capability for greater projection of a more powerful force in being

built into the system at a steady planned pace. Brazil does have the national ability to surge the military into an even greater force if required. The linkage between the military, the government, and the industrial base provides flexibility unknown in most developed countries. Brazil will have the potential technology for nuclear weapons in the late 1980s or early 1990s. The infusion of military officers into the government agencies has given the military potential that cannot be adequately measured but does assure a strong future for the military forces.

ENDNOTES

1. Keegan, John, World Armies, Facts on File, Inc., N.Y., 1979, p. 82.
2. Ibid., p. 79.
3. Ibid., p. 81.
4. Copley, G.R. (editor) Defense and Foreign Affairs Handbook, Copley & Associates, Washington, D.C. 1981, p. 75.
5. Dupuy, T.N. (Colonel) - The Almanac of World Military Powers, Presidio Press, California 1980, p. 77.
6. Ibid., p. 78.
7. Ibid., p. 78.
8. Ibid., p. 78.
9. Ibid., p. 78.
10. Ibid., p. 79.
11. Sellers, Robert C., Armed Forces of the World, Praeger Publishers, New York, 1977, p. 30.
12. Foss, Christopher, Jane's World Armored Fighting Vehicles, St. Martin's Press, N.Y. 1976, p. 124-5, and 194-5.
13. Copley, p. 73.
14. Selcher, Wayne, p. 67.
15. Selcher, Wayne, p. 55.

CHAPTER 5

US AND BRAZIL RELATIONS

It seems each political scientist or just an ordinary writer has a very hard time selecting the proper term to describe the US-Brazil relationship. Colonel Fitzsimmons called the relationship one of fair weather - the countries do well until a difficult situation arises or an honest disagreement occurs.¹ Some compare the relationship to a yo-yo up today - down tomorrow. It seems that the downs are occurring more frequently, and the downs appear to be more serious - at times to the point of ruining the relationship totally.

History

When King John VI arrived in Brazil from Portugal in 1808, President Thomas Jefferson sent a warm letter of welcome. The welcome was reciprocated by: most favored nations status in commerce, freedom of worship, property right, and equality in courts to U.S. citizens.² The friendly start turned sour in 1812 when Brazil did nothing to stop the British from sinking American ships in its waters. Later when Uruguayan privateers fitted out of Baltimore to prey on Brazilian shipping, the US government did nothing to stop it. Following these incidents, tempers cooled and a warm friendship existed.

Fury in 1850 when American hydrographic and astronomer Lt. Matthew F. Maury, USN, published a series of articles advocating the industrialization of the South through the

exploitation of the wealth of the Amazon and the organization of an American expedition to descend the Amazon from its Andean headwaters.³

Maury's papers and actions, which had the apparent approval of the government, truly unset the Brazilian Government and hurt the trust of the nations. In retaliation Brazil accepted the belligerent status of the Confederacy during the American Civil War.

The Baron of Rio-Branco, the Minister of Foreign Relations from 1889 to 1912, set forth the international relations with the US that lasted for 50 years after he left office. He saw that friendship with the US was good for both countries. During this period the US purchased agricultural and raw manufacturing materials in exchange for completed goods. Politically, the Baron craved a link between the US and the Spanish speaking states of the southern hemisphere. He encouraged the first Pan-American conference, assisted in the US-Chile crisis of 1891-2, fostered such good relations that President Cleveland sent the US Navy to Brazil to assist in quelling the sailor revolt in 1893, and negotiated the Brazilian neighbors to accept the US as the arbiter in the territorial disputes.⁴ The impact of Rio-Branco's policies carried the nations through two world wars as close friends.

In 1947 the RIO-Pact, a mutual aid agreement to stop the spread of communism, was signed. Shortly after the RIO-Pact the US became involved in the Marshall Plan and the Korean War and neglected the Brazilian friendship. President Eisenhower stopped federal developmental loans to Brazil and insisted on private investment.⁵ This action caused the Brazilians to question the friendship and more than anything else caused Brazil to adopt a nationalistic development program and started the separation movement away from the US.⁶ In 1958, President Kubitschek proposed "Operation Pan-America" which was a multi-

lateral economic development plan for the Western Hemisphere. The US refused to cooperate until Castro threatened the entire area.

During the early 1960s Brazil was pro-Cuba to include preventing the ouster of Cuba from the organization of American States. The Cuban missile crisis reversed the pro-Cuba feelings. Brazil became involved with internal affairs during the mid 1960s that led to the military takeover. During this same time the US was involved in the Vietnam War. In 1968 the Congress stopped all military aid to South America so the Brazilians went to Europe for help. Following these actions Brazil broke ties with the US by refusing to sign the Nuclear Non-Proliferation Treaty, declaring a 200 mile territorial claim and refusing to accept US economic and military aid. By 1973 Brazil was providing aid to other South American countries.

President Carter tried the hard handed approach with Brazil over civil rights and the German agreement to build a nuclear power plant. In each case Brazil proceeded to handle the issues as internal affairs. The unfriendly wedge was driven deeper between the two old time friends. The link that was established by Baron RIO-Branco between the US and the Spanish speaking countries via Brazil ceased to be effective.

During these political crises the military to military relationship between the two countries remained warm and friendly, albeit on a low key. The militaries continued to operate as normal within the bounds set by the political bodies.

The Regan Administration made positive steps to improve the relations of the governments by placing the civil rights issue behind economic, political and military goals. Both countries have attempted to accept the climatic changes by the exchange of General officer defense

attaches, high level military and diplomatic visits, and economic agreements. The yo-yo appears to be on the rise again.

Summary

My attempt to summarize the US-Brazil relationship over a period of time can be no better than anyone else's. The fair weather friend or the yo-yo description seem appropriate. It does seem the steady state is constantly being upset by the dynamics of a changing world. It would appear that good friends could solve their problems on a more amenable basis.

ENDNOTES

1. Fitzsimmons, James, A Case Study of Militarism in Brazil, Air War College, No. 5905, 1976, p. 37.
2. Hill, Lawrence, Diplomatic Relationships Between the United States and Brazil, Duke University Press, 1932, p. 4.
3. Woodhull, Richard, An Appraisal of United States - Brazil Relations, Air War College, No. 6115, 1976, p. 25.
4. Ibid., p. 29.
5. Raine, Philip, Brazil, Awakening Giant, Washington Public Affairs Press, 1974, p. 200.
6. Fontaine, Roger, Brazil and the United States, American Enterprise Institute for Public Policy Research, 1974, p. 25.

CHAPTER 6

CONCLUSIONS

The foregoing review of Brazil and the relations between that country and the United States leads to several conclusions.

1. Brazil has not been a "banana republic" for the past 50 or more years. It is a nation that is rapidly developing into a major world power.
2. Brazil is unique within the South American Continent in that it is the major economic, military and political leader.
3. As a developing nation Brazil will continue to place priority on its own national interests, even if that results in actions that are opposed by her neighbors and the US.
4. Brazil is rapidly becoming a major economic nation that will compete with all developed nations for foreign markets. Brazil will cause shifts in the market place that sometimes will not be to the advantage of the US.
5. As Brazil continues to gain economic trading partners and military dependent nations through foreign military sales, her sphere of world influence will increase.
6. The United States foreign policies toward Brazil are based on conditions dating to the 1800s and do not recognize the vast changes that have occurred in recent years. These policies are

causing unnecessary political, economic and military conflicts that dangerously weaken relations.

7. The Brazilian Military is becoming a powerful modern force. The influence of the military in the government will remain strong.
8. If the assumption is correct that the US is a mature nation in the life cycle and Brazil is a rapidly rising developing nation, then a strong relationship between the two nations is required for the protection of the Western Hemisphere.

CHAPTER 7

RECOMMENDATIONS

1. The United States Government must recognize Brazil as a major world power not only by words but by actions. The change must start with a strong policy statement which tells Brazil and the rest of the world that we recognize her as a major power. This policy change needs to be followed by upgrading our diplomatic relationship and including Brazil in all discussions that affect the Western Hemisphere and most issues that affect the Western World.
2. The United States must encourage Brazil to assume the powerful role as the leader of South America. Brazil has found the solution to economic and political stability in a region that has historically been very unstable. The recognition of this stability will lead to cooperation and the strengthening of mutual interest ties.
3. The US must recognize that Brazil's main interests are those centered around nation building, and our actions should be supportive, not destructive as with was the case over civil rights and the nuclear power issues.
4. Our nation must develop realistic policies toward Brazil that encourages the economic growth of each nation without

exacerbating the competitive aspects. We need to encourage private and government joint ventures and developmental projects.

Brazil will receive this type of help from other nations. It is far better that the assistance come from the US instead of Russia or a Pact nation.

5. A strong military force in Brazil is to the advantage of the US, as well as the other nations in the Western World. We must encourage the development of this force. The trust between the leadership of the two forces is strong and should be used as a foundation to build greater cooperation. This cooperation should include material development, mutual training, interoperability and standardization. The forces must be able to fight as allies. Such actions will show the world the strength of the two countries' relationship.
6. The US Army must seek approval to start the new era of cooperation by:
 1. Increasing the size of the military group stationed in Brazil to a sufficient number of soldiers to handle the proposed joint actions.
 2. Initiate joint training exercises of units on the same scale as the NATO maneuvers.
 3. Initiate joint material development projects that will improve the defense production bases of each country.
 4. Reestablish the student exchange program where military students are enrolled in Army schools to include the War Colleges.
 5. Develop mutual defense plans that require the cooperation and support of each nation.

BIBLIOGRAPHY

- Bell, Peter, Brazilian - American Relations, Brazil in the Sixties, Vanderbilt University Press 1972.
- Dickenson, John P., Brazil, Westview Press, Colorado, 1978.
- Fontaine, Roger W., Brazil and the United States, American Enterprise Institute for Public Policy Research, 1974.
- Forte, Johnie, The Organization of American States: A Study of Its Economic and Security Capabilities, Air War College, 1976.
- Henshall, J. D. & Momsen, R. P., A Geography of Brazilian Development, Bell & Sons, London, 1974.
- Hill, Lawrence F., Diplomatic Relationships Between the United States and Brazil, Duke University Press, 1932.
- Keegan, John, World Armies, Facts on File, Inc., N.Y. 1979.
- Momsen, Richard P., Brazil - A Gaint Stirs, D. Van Nostrand, Co., N.J. 1968.
- Overholt, William, The Future of Brazil, Westview Press, Colorado, 1978.
- Raine, Philip, Brazil, Awakening Gaint Washington Public Affairs Press, 1974.
- Roett, Riordan, Brazil in the Seventies, American Enterprise Institute for Public Policy Research, 1976.
- Selcher, Wayne A., Brazil in the International System: The Rise of a Middle Power, Westview Press, Colorado, 1981.
- Smith, Lynn, Brazil: People and Institutions, Baton Rouge, LSU Press, 1972.
- Woodhull, Richard, An Appraisal of United States - Brazil Relations, Air War College No. 6115, 1976.

Brazil, The Moving Frontier, The Economist, Vol. 244, 2 September 1972.

II National Development Plan 1975-1979, Federal Republic of
Brazil, 1974.

Numerous Newspaper articles as reported by the Foreign Broadcast
Institute Service.